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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/066,990      | 02/04/2002  | James J. Kobe        | 57148US002          | 4190             |

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EXAMINER

VO, HAI

ART UNIT PAPER NUMBER

1771

DATE MAILED: 02/26/2003

3

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/066,990

Applicant(s)

KOBE ET AL.

Examiner

Hai Vo

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1)  Responsive to communication(s) filed on 20 May 2002.
- 2a)  This action is **FINAL**.
- 2b)  This action is non-final.
- 3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4)  Claim(s) 1-22 is/are pending in the application.  
4a) Of the above claim(s) 16-22 is/are withdrawn from consideration.
- 5)  Claim(s) \_\_\_\_\_ is/are allowed.
- 6)  Claim(s) 1-3 and 5-15 is/are rejected.
- 7)  Claim(s) 4 is/are objected to.
- 8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9)  The specification is objected to by the Examiner.
- 10)  The drawing(s) filed on 04 February 2002 is/are: a)  accepted or b)  objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11)  The proposed drawing correction filed on \_\_\_\_\_ is: a)  approved b)  disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12)  The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14)  Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a)  The translation of the foreign language provisional application has been received.
- 15)  Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1)  Notice of References Cited (PTO-892)
- 2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3)  Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4)  Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- 5)  Notice of Informal Patent Application (PTO-152)
- 6)  Other:

***Election/Restrictions***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-15, drawn to a flame retardant article, classified in class 428, subclass 317.9.
  - II. Claims 16-22, drawn to a method for preparing a flame retardant article, classified in class 264, subclass various.
2. The inventions are distinct, each from the other because of the following reasons:

Inventions II and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, the product as claimed can be made by another and materially different process such as heat lamination instead of extrusion.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.
3. During a telephone conversation with Daniel R. Patirisk on 02/12/2003 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-15. Affirmation of this election must be made by applicant in replying to this Office action. Claims 16-22 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 9-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 9, it is unclear. Do Applicants mean the antimony-free fire retardant itself including a blowing agent or an article including a blowing agent?

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-3, 5-12 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gehlsen et al (US 6,103,152) in view of Parsons et al (US 5,851,663). Gehlsen teaches an adhesive tape having every element set out in the claims except an antimony-free fire retardant (examples 1-5). Parsons teaches an adhesive tape comprising a foam layer that includes an antimony-free flameproofing agent such as ammonium polyphosphate and a backing layer bonded to the foam layer (column 3, lines 1-12, and 58-60). It would have been obvious to one having ordinary skill in the art at the time the invention was made

Art Unit: 1771

to employ an antimony-free fire retardant in the adhesive tape motivated by the desire to achieve a flameproofing effect and environmental safety.

With regard to claims 2 and 3, Gehlsen reads on the claim limitations (abstract and table 1).

With regard to claims 6 and 12, Gehlsen discloses the adhesive tape having a thickness greater than 1 mm (column 14, line 23). However, such a variable would have been recognized by one skilled in the art to impart the strength of the foam layer and as well as to improve the adhesion of the foam layer and the adhesive layer. As such, in the absence of unexpected results, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the foam layer having a thickness instantly claimed since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Parsons discloses an antimony-free flameproofing agent having been added to the adhesive in the amount of from 25 to 75 weight percent (column 3, line 21), meeting the specific range required by the claims. Such a concentration would have been recognized by one skilled in the art to achieve an optimum flameproofing effect. As such, in the absence of unexpected results, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the antimony-free flameproofing agent having an amount instantly claimed since it has been held that where the general conditions of a

Art Unit: 1771

claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

With regard to claims 10 and 11, Gehlsen fails to teach the flame retardant synergists in an adhesive layer. Parsons teaches a foamed adhesive composition comprising the flame retardant synergists (column 2, lines 61-65). It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the flame retardant synergists in the foamed adhesive composition motivated by the desire to obtain a reduction in the tendency to produce burning drips during combustion.

With regard to claim 15, since the article of Gehlsen modified by Parsons is structurally the same and made from the same materials as that of the present invention, it is the examiner's position that the article of Gehlsen modified by Parsons would inherently pass one of the tests as set forth in the claims.

8. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gehlsen et al (US 6,103,152) in view of Parsons et al (US 5,851,663) as applied to claim 1 above, further in view of Bonk et al (US 4,751,269). The combination of Gehlsen and Parsons fails to teach microfibers in an adhesive layer. Bonk teaches an adhesive composition comprising microfibers as a reinforcing filler (column 6, lines 1-5). It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ microfibers in the adhesive layer motivated by the desire to increase strength and flexibility of the flame-retardant article.

9. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gehlsen et al (US 6,103,152) in view of Parsons et al (US 5,851,663) and Bonk et al (US 4,751,269), as applied to claim 13 above, further in view of Perez et al (US 6,110,588). The combination of Gehlsen, Parsons and Bonk fails to teach a microfiber comprising semicrystalline homopolymer of polyalkylene resin. Perez discloses a microfiber comprising polybutene (column 3, lines 54 and 60). It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ microfibers comprising polybutene because of its easy availability and economic advantage.

***Allowable Subject Matter***

10. Claim 4 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. None of the prior art discloses or suggests a flame retardant article comprising a foam layer comprising a polymer, antimony-free fire retardant and a plurality of expanded polymeric microspheres and an adhesive layer bonded to the foam layer wherein the adhesive layer is formulated without fire retardant agent.

***Conclusion***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai Vo whose telephone number is (703) 605-4426. The examiner can normally be reached on Tue-Fri, 8:30-6:00 and on alternating Mondays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (703) 308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

*Eligible for M.A.C.*

HV  
February 23, 2003